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Wisconsin Immunization Program
Frequently Asked Questions and Answers
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The following narrative contains frequently asked questions about mumps and mumps vaccine which was adopted, with permission, from materials provided by the Iowa Department of Public Health. The document is intended to provide guidance to health care workers and public health officials while managing a case of mumps or a mumps outbreak in their communities.

Q. We received your information about mumps testing, but providers need more specific information. Which test is preferred?

A. The preferred test for mumps diagnosis is the IgG/IgM test of sera. IgG tests measure existing antibody levels. The IgM test detects more recently derived antibody. Submission of saliva for virus culture is important for determining the strain of mumps virus. The submission of CSF is indicated when there is central nervous system involvement. Currently we would prefer to complete both the serologic and culture tests as we are very interested in knowing which strain is circulating in Wisconsin patients, where this strain is coming from and how widespread it is. If only one test must be selected, then select the IgG,/IgM test…the results are available much sooner and it provides needed data regarding prior immunity and recent infection.

Q. Should these specimens be sent to our usual out-source lab, or should they be sent to the Wisconsin State Laboratory of Hygiene (WSLH)?

A. Please send all specimens to the WSLH. This is particularly important for the culture specimens. Saliva swabs can be sent using any of the commercially available transport media. Empty sterile containers can be used for submitting urine specimens. All specimens should be kept at refrigerator temperatures before and during transport.

Q. What is the turn-around time for these results (which test is the fastest)?

A. The IgG/ IgM testing can be completed within 12-24 hours of specimen arrival at the WSLH on non-weekend days. Cultures result availability may take up to 10 days.

Q. Because of the current request for increased surveillance for mumps are the laboratory tests done at the WSLH available at no cost?

A. It is preferred that insurance coverage be applied to cover the applicable fees whenever possible. If insurance coverage is not available, the specimens can be submitted with a request for fee exempt testing. Please work with your local health department when requesting fee exempt testing.

Q. Can you help clarify whether there are any special techniques for collecting the saliva samples around the Stensen's ducts?

A. To collect a saliva sample, swab the inside of the cheek around the molars. Prior to collecting the sample, massage the cheek directly in front of the ears to stimulate saliva.

Q: Some individuals are presenting for testing on day one or two of swelling. Physicians are reporting that the state encourages testing on day three or four. Does the individual have to return in two days, or can the testing be done earlier?

A. In symptomatic persons lab specimens can be obtained whenever the patient is seen, but four to five days after onset of symptoms is an ideal time for specimen. A patient who presents earlier does not have to wait and return later. Please obtain the appropriate specimens and submit to the WSLH for testing.

Q. Do we have to place these patients on home isolation until the negative test result returns?

A. An individual with the diagnosis of possible mumps should be isolated through the ninth day after the onset of parotitis (salivary gland swelling) if laboratory results are not available before that interval is over. However, if test results demonstrate the individual does not have mumps and the individual does not have a transmissible illness, the individual may be released from isolation.

Q. When we know that there is mumps in our county, should the providers stop testing new case patients presenting to their offices?

A. No. For public health purposes, the Wisconsin Immunization Program asks that every new symptomatic case, that is not epi-linked to a known case, be tested. In addition, clinicians should remember to fill out the DPH 4151 Communicable Disease Case Report and submit it promptly to the local health department. The local health department should fill out a Mumps Surveillance Worksheet on all suspect case patients.

Q. What constitutes an exposure to mumps?

A. Exposure is considered to be contact within 3 feet to droplets from nasal or oral secretions or direct contact with saliva when the case patient was in the infectious period and the exposed individual did not use appropriate personal protective equipment (PPE) – gloves and mask. Exposure does not have to occur over a specifically defined length of time. Mumps virus is spread in respiratory droplets and contagiousness is similar to influenza and rubella and less than measles and varicella.

Q. What is the guidance for nurses and staff/and or teachers at schools and day care centers regarding receiving the mumps vaccine or having mumps antibody testing?

A. Children K-12 should already have history of two MMR. Teachers and all staff should have their immune status verified (vaccination with two doses of mumps containing vaccine or serologic evidence of immunity). All staff should be educated regarding hygiene, prevention and signs and symptoms of disease. A

mumps fact sheet is available at the Department of Health and Family Services web sites:
www.dhfs.wisconsin.gov/communicable/communicable/factsheets/Mumps.htm.

Q. Do health care workers (HCWs) and patients need to wear N-95 masks?

A. No. Properly worn procedure or surgical masks are sufficient. HCWs should maintain Standard and Droplet Precautions when caring for and examining patients with signs and symptoms of respiratory illness.

Q. Should volunteers be included among those considered to be HCWs?

A. Depending on their patient contact, which defines their potential for exposure and spread to patients, you may need to vaccinate. Prioritize accordingly.

Q. What can be done to prevent mumps exposures in a clinic or doctor's office?

A.

Infection control:

- When assessing a patient for possible mumps, staff should follow Standard and Droplet Precautions.
- Have surgical masks for coughing patients readily available.
- Wear appropriate PPE while performing exams, i.e. masks with a coughing patient (droplet spread).
- Have disposable tissues readily available. Practice appropriate cough etiquette.

Screen patients

- Screen individuals for mumps symptoms when calling-in for an appointment. If clinically compatible with mumps, do not allow them to sit in the waiting area. Request that they wear a surgical mask.
- Separate coughing or ill patients in the waiting area or have a separate area designated.

Check immune status of health care workers

- Determine the immune status of personnel, either documentation of two MMRs or a positive mumps IgG. If vaccination status is not adequate, vaccinate with MMR unless contraindicated.

Symptomatic staff members

- Any staff member with signs and symptoms of mumps should be sent home and instructed to remain at home through the ninth day after onset of parotitis or other salivary gland swelling or until well, whichever is longer.
- Susceptible personnel who have been exposed to a case of mumps should be furloughed from the 12th day after the first exposure through the 25th day after the last exposure.

Q. What are the recommendations for MMR vaccine?

A. The first dose is recommended at 12-15 months of age and the second dose is recommended at school entrance (4-6 years of age). A third dose is not recommended.

Q. Can VFC vaccine be used?

A. Yes. Vaccine For Children (VFC) vaccine is for VFC eligible children who are 18 years of age and under.

Q. Should children under 12 months be given their first dose of MMR?

A. No. Children under 12 months will have immunity conferred from their mother if the mother is immune. The Wisconsin Immunization Program is not recommending giving the first dose early.

Q. Should children who have received their first dose of MMR be given their second dose before the kindergarten booster?

A. No. The Wisconsin Immunization Program is not recommending giving the second dose early.

Q. If a person is unsure about having previously received mumps vaccine or having the disease is there any harm in receiving the MMR vaccine?

A. Administering an extra dose of live, attenuated virus vaccine to immunocompetent persons who already have vaccine-induced or natural immunity has not been demonstrated to increase the risk of adverse events.

Q. Should college students have a history of having received two doses of MMR.

A. Yes, unless there is laboratory evidence of immunity.

Q. Should individuals in the general population have a history of having received two doses of MMR.

A. At this time the recommendations state that persons who are not in an otherwise identified risk group (HCWs, teachers and staff at schools and day care centers, students in grades K-12 and college students) who were born prior to 1957 are generally considered to be immune, even if they did not have clinically recognizable mumps disease. Live mumps vaccine was not used routinely before 1977, and the peak incidence of disease was among 5 to 9 year olds before the vaccine was introduced. Most people born before 1957 are likely to have been infected naturally prior to 1977.

Individuals born in 1957 or later should have a history of receiving one dose of a mumps containing vaccine. At this time there is no recommendation for a second dose of mumps containing vaccine for individuals that are not in an otherwise identified risk group.

Q. How many days does it take for a person to develop immunity after the administration of MMR?

A. In general, it takes 10-14 days to mount an immune response to mumps vaccine if it is the body's first exposure to the vaccine.

Q. Can the Wisconsin Immunization Program help local providers obtain MMR at reduced cost through the federal contract?

A. No, at the present time Merck is unable to do this. However to order vaccine, call Merck 1-800-672-6372 or your pharmacy. You may want to work with other

partners and organizations that would be ordering vaccine to negotiate reduced pricing.

Q. If a healthcare worker is immune (two documented doses of MMR or a positive mumps IgG) do they still need to wear PPE when examining patients?

A. Yes. HCWs need to protect themselves from diseases other than mumps.

Q. Is MMR vaccine recommended for HCW who were born before 1957?

A. If the HCW is unsure of a history of mumps either a serologic test should be run to determine antibody status or the HCW should be vaccinated. The health institution should determine the cost effectiveness of vaccinating or testing. If the worker is susceptible two appropriately timed doses of MMR vaccine should be administered.

Live mumps vaccine was not used routinely before 1977, and the peak incidence of disease was among 5 to 9 year olds before the vaccine was introduced. Most people born before 1957 are likely to have been infected naturally prior to 1977. As a result, persons born before 1957 generally may be considered to be immune, even if they did not have clinically recognizable mumps disease.

Q. Should a test for IgG be conducted after two doses of MMR to confirm immunity?

A. No. It is not necessary to test for IgG after vaccine administration to confirm immunity.

Q. Can the single mumps antigen be used to vaccinate instead of MMR?

A. The preferred vaccine is the MMR combination. Single antigen mumps vaccine can be used if MMR is not available.

Q. What is the risk to a newborn delivered to a mother who has mumps?

A. The period of infectivity of the mother will be highest from 3 days before onset of symptoms to 9 days after onset of symptoms. During that time, there is a chance that the mother could transmit mumps to her newborn child. However, most children with mumps virus infection under the age of two years have mild or asymptomatic cases. There are no recommendations for separating infants from mothers with active cases of mumps. If delivery occurs while the mother is infectious, and the infant remains in the nursery for an extended period of time, he/she should be placed in droplet precautions from days 12-25 after exposure to the mother.